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ABSTRACT

This study sought to determine if a professional course of study during teacher preparation in physical education had more influence on teaching effectiveness than a discipline-oriented course of study. The subjects were 41 undergraduates involved in two different physical education programs. The discipline-oriented course contained such subjects as kinesiology, motor learning, exercise physiology, and a number of skill-oriented courses. The professional program included foundations, kinesiology, two elementary methods courses, adapted physical education, and only four activity courses. The Academic Learning Time Observation System II was used to collect data on the subjects. No significant difference in overall teaching effectiveness was found between the two groups. Interns in the profession-oriented course of study who were involved in at least two or three field experiences were not any more effective than the discipline-oriented group who were involved in their first field experience. The major recommendation derived from the study is to continue to monitor interns not only during student teaching but during the induction phase of teaching to help teacher educators ascertain the effect of professional preparation and its components. (Author/JD)

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Teacher Effectiveness In Physical Education: Profession Vs Discipline

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Abstract

The purpose of this study was to determine the effect of teacher preparation programs on teacher effectiveness during a field experience. The subjects were forty-one undergraduates involved in two different physical education teacher preparation programs. Data was collected on all forty-one interns during a field experience in the public schools. The observation instrument used to collect data during the two lessons taught by each intern was the Academic Learning Time Observation System II. There was not a significant difference in overall teaching effectiveness between the two groups. Interns in the profession oriented course of study who were involved in at least two or three field experiences were not any more effective than the discipline oriented group of interns involved in their first field experience. The major recommendation is to continue to monitor interns not only during student teaching but into the induction phase of teaching. This will help teacher educators ascertain the effect of professional preparation and its components.



The debate over how students should be prepared as teachers in our teacher preparation programs and the type of courses they should take has escalated again in the last few years. All you have to do is peruse the generic teacher education journals or physical education teacher education journals and you will find a number of articles dealing with what's wrong with teacher education and teacher education reform (ATE Blue Ribbon Task Force, 1986; Kirby, 1986, Siedentop, 1985). Also, many states have initiated new mandates for teacher education. For example, Texas has increased the number of field experience hours prior to student teaching, the length of student teaching, basic skills tests before entry into teacher education, and exit exams in the interns' teaching fields for certification.

Many of these same controversies are going on in physical education along with the longest running debate which is whether the major focus for physical education teacher preparation should be a discipline oriented approach or a profession oriented approach. This debate has gone on for over twenty years with some legendary articles written on this controversy (Henry, 1964; Morford, 1965; Locke, 1977; Siedentop, 1976; and Lawson et al, 1985). Even though the rhetoric between the two side goes on, the major question has still not been answered, does a specific course of study really make a difference in actual teacher effectiveness over the short and long term?

The significance of this pilot study was to collect data on two different groups of student interns involved in two fairly different teacher preparation programs in physical education. Most professionals concur that it is next to impossible for all teacher preparationprograms to be the same, but some generic recommendations for teacher preparation in physical education are needed. One of the arguments associated with the primary debate is on the importance of early



field experiences in teacher preparation. Dodds (1985) pointed out the major controversies surrounding the importance of early field experience. A few examples are now offered: (1) no relationship between number of hours spent in early field experiences and performance in student teaching (Calfee, 1983), (2) students with more field experiences were not any better in their teaching performance than those with fewer experiences in schools (Kelly, 1970), (3) some students with early field experiences did better in both concurrent and later coursework than students without (Denton, 1982; 1983), and (4) student teachers who had early field experiences provided higher student activity time and ALT than student teachers who had no early field experiences in physical education (Paese, 1984). More research is still needed in this area especially in physical education. The purpose of this study was to assess if a professional course of study during teacher preparation in physical education had more of—an influence on teaching effectiveness than a discipline oriented course of study.

Methods

Forty-one undergraduates from a medium size state university were used as subjects for the study. Twenty-two of the subjects were secondary physical education majors (grades 7-12) and followed a discipline oriented course of study during their teacher preparation. Nineteen of the subjects were elementary education majors with an elementary physical education specialization and were involved in a profession oriented course of study during teacher preparation. Three of the forty-one students were involved in both experiences taking the elementary course as an elective course of study. The reason elementary education physical education specialization students were chosen for this study was because their teacher preparation program was much more profession oriented than the K-12 physical education students.



Independent/Dependent Variables

The major independent variable used in this study was the type of teacher preparation program the students were involved in. The discipline oriented course of study contained such courses as kinesiology, motor learning, exercise physiology, a number of skill oriented courses (10) and no prior field experiences in the public schools prior to the one used during this study. The profession program included such courses as foundations, kinesiology, two elementary methods courses, adapted physical education and only four activity courses. Within this program students had forty-five to sixty hours of field experiences in the public schools.

The dependent variables used in this study aided in the overall assessment of teacher effectiveness. The five variables were as follows; management (time spent organizing and disciplining students), instruction (time spent in the cognitive domain, terminelogy, rules, background, etc.), activity (time spent in game play, skill work, and fitness), engaged motor (amount of time students are involved in physical education content directly or indirectly involved in game, skill or fitness activities) and Academic Learning Time-Physical Education (amount of time students were involved in physical education content directly involved in game, skill or fitness activities with a high rate of success.

Observation and Data Collection

All forty-one students were involved in their respective methods classes in elementary and secondary physical education. Both groups of students were involved in a five week public school experience. Students were observed teaching two lessons in the public schools at the end of the fourth and fifth weeks respectively. Data was collected over a two year period in order to



increase the number of subjects in each group. The instrument useu for data collection was the Academic Learning Time Observation System (Siedentop, Tousignant & Parker, 1982). The secondary students (Discipline Oriented Program) were involved in their first field experience in the public schools. The interns observed in this group did their teaching at the middle school level, grades six and seven in a number of different skill activities. Class size averaged twenty-seven per class. The elementary interns were involved in their second or third field experience in physical education. At the time of data collection all students in this group had several hours of observation in public schools through some generic education courses. Interns in this group did their field experience in an elementary school with fourth and fifth grade students. Class size averaged thirty-six students per class. All interns had the same methods instructor for both courses.

<u>Reliability</u>

Coders for the study were six graduate students who were trained in supervision and observation systems in a graduate class. All six graduate students passed a final reliability check during class at .86 for the ALT II Observation System. Two reliability checks were taken during the study on each coder at the beginning and at the end of data collection. Interobserver agreement ranged from .80 to .87 on the 6 major categories of the ALT system. The combined average reliability for all coders was 845. Interobserver agreement was calculated using the scored interval method of calculation (Hawkins & Dotson, 1975) which is a much more stringent measure than normal interval by interval calculation.

Analysis of Data

The data were analyzed by calculating the means for the two groups on each of the five variables. An independent t-test was used to analyze the differences between the two groups on the five dependent variables.

Results

The elementary interns in the profession oriented teacher education program had more management time 13.7% than the secondary interns 10.3%. This difference was significant (\underline{P} <.01). The elementary interns also had less activity time 59.1% than the secondary interns 67.8%. This difference was also significant (\underline{P} <.03). There were no significant differences between the two groups in instruction time (\underline{P} <.07) and in the variable engaged motor (\underline{P} <.40). The elementary interns did have significantly higher ALT 38% than the secondary interns from the discipline oriented program 30.5% (\underline{P} <.02).

Table 1 Goes About Here

The three students who were involved in both classes had no significant differences on any of the variables when comparing their two secondary lessons with the two elementary lessons.

Conclusion/Discussion

The major conclusion generated from the data collected was that even though there were some significant differences between groups on some variables, both groups were generally similar in their overall teaching effectiveness. Some of the differences could be predicted because of activities taught, skill level, class size, equipment, etc. The higher ALT percentage for the elementary teachers classes was consistent with the findings by Metzler (1979) in his



comparison of elementary and secondary physical education classes. Both groups did a good job in the area of classroom management and in keeping students involved in the subject matter. In fact, both groups would fair well in comparison to student teachers, and induction physical education teachers when using the variables measured in judging teaching effectiveness.

From the data generated from this study it illustrates that the previous field experiences did not have a major effect on the teaching effectiveness of the profession oriented interns. After the aforementioned statement questions arise such as, would there have been a difference between the two groups if data would have been collected at the beginning of the experience, rather than after three weeks because of the socialization effect? Other questions to ponder are, do more activity classes and previous athletic experiences for the discipline oriented group tend to even out the effect of the previous field experiences for the profession oriented group or does more than one field experience have a negative effect on teaching effectiveness? Since the interns in the profession program were not more effective teachers than the discipline oriented secondary interns a reaffirmation of Calfee's (1983) conclusion that one field experience no matter what the length does have a positive influence on teaching interns and that any experiences beyond the first can possibly have a negative influence is warranted. Even Dodds (1985) suggestion of structured field experiences may not have an immediate positive effect on interns.

A recommendation for further study would be to use smaller numbers of interns in both groups with the elementary interns teaching fifth grade classes and the secondary interns teaching sixth grade classes in an Experimental Teaching Unit (ETU) on the same novel sport skill. There is also a need to continue to monitor groups of students like the ones used in this study not only



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upon their entry into student teaching, but at least through the induction years of teaching. Too much emphasis is placed on how interns do during teacher preparation and not enough in the subsequent years after certification. It is just possible that many teacher preparation programs' real shortcomings or successes will not surface right away. Not only could there be a difference in teaching effectiveness between the two groups used in this study during the induction years but what about percentages of these students who actually enter into the profession, longevity, job transfer and socialization/burnout? The need for some generic recommendations on courses of study and experiences during teacher preparation has been ignored too long. Hopefully these recommendations will be forthcoming if research is continued in this area on teaching interns not only during teacher preparation but in the years after pre-service teacher preparation.



REFERENCES

- ATE Blue Ribbon Task Force, (1986). Visions of Reform: Implications for the Education Profession", Association of Teacher Educators, Reston, Virginia.
- Calfee, T.H. (1983). The relationship between early field experiences and performance during student teaching", <u>Dissertation Abstracts International</u>, 41, 2560-A. University Microfilms No. 80-27, 664.
- Denton, J. (1982). "Early field experience influence on performance in subsequent coursework. <u>Journal of Teacher Education</u>, 33 (2), 19-23.
- Denton, J. (1983). "Do early experiences in teacher education provide a meaningful context for acquiring pedagogical knowledge?" Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Quebec.
- Dodds, P. (1985). "Delusions of 'Worth-it-ness': Field experiences in elementary physical education teacher education programs". In, <u>Proceedings of the Second National Conference on Preparing the Physical Education Specialist for Children</u>, H. Hoffman & J. Rink, Ed. 90-109.
- Henry, F. (1964). Physical education: An Academic Discipline, " JOHPER 37: 32-33.
- Kelly, D. (1970). "An assessment of the effects of two experimental arrange wints on the classroom behaviors of student teachers as measured by IOTA".

 Doctoral dissertation, Arizona State University. ERIC Document Reproduction Services, No. ED. 053073.
- Kirby, W.N.)1986). "The state of education reform in Texas" <u>Teacher Education & Practice</u>, 3 1, 5-16.
- Lawson, H., Belka, D., & Simmons, R. (1985). "Disciplinary Knowledge in teacher education programs". Proceedings of the Second National Conference on Preparing the Physical Education Specialist for Children. H. Hoffman & J.; Rink, Ed., 32-47.
- Locke, L. (1977). "From research and the discipline, to practice and the profession", NCPEAM Proceedings, 35.
- Metzler, M. (1979). The measurement of Academic Learning Time in physical education (Doctoral dissertation, Ohio State University) DAI No. 8009314.
- Morford, R. (1972). "Toward a profession, not a craft" Quest, 18, 88.
- Paese, P.C. (1984). "A comparison of student teachers with and without prior field experiences and the effect on criterion process variables during student teaching" In W. Kroll, Ed. Abstracts of Research Papers 1984, American Alliance for Health, Physical Education, Recreation and Dance Convention 7.



Profession vs Discipline

- Siedentop, D. (1976). "On tilting the windmills while Rome burns" $\underline{\text{Quest}}$ $\underline{\text{25}}$ 94-97.
- Siedentop, D. (1985). "The Great Teacher Education Legend", <u>Proceedings of the Second National Conference on Preparing the Physical Education Specialist for Children</u>, In H. Hoffman & J. Rink, Ed. 48-57.



Table 1

Comparison of Elementary and Secondary Majors
On Selected Variables Between Groups

Variable	Group	Mean	Sd	t	Р
Management	Elementary Secondary	13.7% 10.3%	3.8 5.3	-2.38	.01
Instruction	Elementary Secondary	23.3% 21.9%	10.9 10.9	-0.41	.07
Activity	Flementary Secondary	59.1% 67.8%	15.9 13.1	1.89	.03
Engaged Motor	Elementary Secondary	45.6% 44.7%	9.3 12.3	-0.25	.40
ALT	Elementary Secondary	37.0% 30.5%	9.9 12.6	-1.93	.02